## **ABSTRACT**

A diagnostic system and method for a valve, especially a check valve of a positive displacement pump, including at least one solid-borne sound sensor is provided. A first value of a parameter of a sound signal recorded in the closed state of the valve and a second value of a parameter of a sound signal recorded in the open state of a valve are determined essentially. A signal indicating a disturbance is issued if the deviation between the first value and the second value exceeds a predefined threshold value, resulting in particularly good insensitivity.